

Shawnee Mac Lakes Conservation Area

Ten-Year Area Management Plan FY 2016-2025



Lisa B. Allen

Forestry Division Chief

3-24-16

Date

Shawnee Mac Lakes Conservation Area Management Plan Approval Page

PLANNING TEAM

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OVERVIEW

- **Official Area Name:** Shawnee Mac Lakes Conservation Area, # 7820
- **Year of Initial Acquisition:** 1982
- **Acreage:** 256 acres
- **County:** Dent
- **Division with Administrative Responsibility:** Forestry
- **Division with Maintenance Responsibility:** Forestry
- **Statements of Purpose:**
 - A. Strategic Direction**

Sustain healthy forests, grasslands and aquatic communities at the Shawnee Mac Lakes Conservation Area (CA). Provide outdoor recreational and educational opportunities near the city of Salem.
 - B. Desired Future Condition**

The desired future condition is an area with healthy forests, grasslands and aquatic communities.
 - C. Federal Aid Statement**

N/A

GENERAL INFORMATION AND CONDITIONS

- I. Special Considerations**
 - A. Priority Areas:** Dry Fork Fisheries Priority Watershed
 - B. Natural Areas:** None
- II. Important Natural Features and Resources**
 - A. Species of Conservation Concern:** Species of conservation concern are known from this area. Area Managers should consult the Natural Heritage Database annually and review all management activities with the Natural History Biologist.
 - B. Caves:** None
 - C. Springs:** Yes, records kept with the Missouri Department of Conservation (the Department) Natural History Biologist.
 - D. Other:** Three Ozark fens
- III. Existing Infrastructure**
 - 4 gravel parking lots, Americans with Disabilities Act (ADA) accessible
 - 2 concrete boat ramps (one at each lake)
 - 2 privies (ADA accessible)
 - 1 floating fishing platform with paved access trail (ADA accessible)

- 2 wooden benches
- 1 seven-target archery range (ADA accessible)
- 1 pavilion with picnic tables and grills (ADA accessible)
- 5 concrete picnic tables with concrete pads and grills (1 ADA accessible, under pavilion)
- 1 primitive campsite (no amenities)
- 17-acre fishing lake (Turner Lake)
- 30-acre fishing lake (Ziske Lake)
- 1.5-mile Ziske hiking trail
- 1.0-mile Turner hiking trail
- 2 dams

IV. Area Restrictions or Limitations

- A. Deed Restrictions or Ownership Considerations:** None
- B. Federal Interest:** Federal funds may be used in the management of this land. Fish and wildlife agencies may not allow recreational activities and related facilities that would interfere with the purpose for which the State is managing the land. Other uses may be acceptable and must be assessed in each specific situation.
- C. Easements:** In 1989, the City of Salem was granted a 15-foot-wide sewer line easement. This is located in the southwest corner of the property.
- D. Cultural Resource Findings:** No known cultural resources.
- E. Hazards and Hazardous Materials:** None observed.
- F. Endangered Species:** None observed.
- G. Boundary Issues:** None

MANAGEMENT CONSIDERATIONS

V. Terrestrial Resource Management Considerations

Shawnee Mac Lakes CA includes a mix of hardwood and shortleaf pine forests and grassland communities. The hardwoods are of mixed age and size classes. The pine plantations were planted by a previous owner (Dr. Ziske) and have been thinned twice to maintain a healthy stand. The grassland is predominantly fescue grass. Fescue occurs around the lakes and in a 10- to 15-acre field (south of the lower lake). The conservation area also contains three Ozark fens.

Challenges and Opportunities:

- 1) Sustain a healthy forest.
- 2) Protect the watershed through proper forest management.

- 3) Manage open land/grassland communities.
- 4) Control invasive or exotic plant and animal species.

Management Objective 1: Sustain a healthy forest through forest management.

Strategy 1: Maintain current annual inspections to check for insect and disease outbreaks and die back. (Forestry)

Strategy 2: Periodically monitor the area for seedling recruitment and other forest community issues. (Forestry)

Management Objective 2: Protect the area watershed through proper forest management.

Strategy 1: Monitor the area for inappropriate/damaging uses of the area, especially on the hiking trails. (Forestry, Protection)

Strategy 2: Work with neighboring landowners to promote proper forest/watershed management. (Forestry, Private Lands Services)

Management Objective 3: Manage open land/grassland communities.

Strategy 1: Periodically mow or burn the two large fields below the lower lake (30 acres) to maintain them in an old field condition. (Forestry, Wildlife)

Strategy 2: Evaluate the need to plant some wildlife friendly trees and shrubs in the open areas to provide food for wildlife that reside on the area. (Forestry, Wildlife)

Management Objective 4: Control invasive or exotic plant and animal species.

Strategy 1: Monitor high priority invasive or exotic species (e.g., spotted knapweed, Japanese stiltgrass and feral hogs). Eradicate and/or control invasive or exotic species, as possible. (Forestry, Wildlife)

IV. **Aquatic Resource Management Considerations**

Ziske Lake (30 acres) and Turner Lake (17 acres) are in close proximity and contain similar fish communities. They are, subsequently, managed using the same regulations. The acreage and fish communities of these lakes have been stable since (and prior to) the purchase of the area in 1982. The current status of the fish populations can be found in sampling reports held by the Ozark Region Fisheries Regional Supervisor.

Lake dams were renovated in 1986.

Challenges and Opportunities:

- 1) Maintain quality fisheries at the lakes.
- 2) Enhance fishing opportunities.
- 3) Maintain lake infrastructure.

Management Objective 1: Maintain quality sport fisheries for largemouth bass, channel catfish and sunfish through appropriate regulations.

Strategy 1: Install natural fish habitat in years when ice cover allows. (Fisheries)

Strategy 2: Maintain an acceptable level (25 to 40 percent) of aquatic vegetation to provide summer cover for small fish. (Fisheries)

Strategy 3: Continue to sample fish populations every two to three years. (Fisheries)

Strategy 4: Survey for invasive aquatic plants and animals that may reduce fishing quality. (Fisheries)

Strategy 5: Maintain largemouth bass and sunfish populations by natural recruitment. Maintain channel catfish populations by yearly stockings. (Fisheries)

Management Objective 2: Enhance fishing opportunities.

Strategy 1: Spray aquatic vegetation to maintain fishing lanes and open areas in high use bank areas. (Fisheries, Forestry)

Strategy 2: Look for opportunities to enhance angler access from the trail around Ziske Lake. (Fisheries, Forestry)

Management Objective 3: Maintain lake infrastructure.

Strategy 1: Keep both dams free of woody vegetation to minimize water level loss. (Forestry)

Strategy 2: Check the outflow structures yearly to ensure proper functioning. (Fisheries, Forestry)

VII. Public Use Management Considerations

There is a trail around each of the area lakes. The trail around Ziske Lake is a 1.5 mile hard-packed gravel hiking trail. This trail goes through the pines, a natural opening (of native rattle snake master plants) and mixed oak and hickory hardwood forest. The trail receives a lot of use from locals and can be used for educational purposes. The trail around Turner Lake is approximately 1.0 mile. It is all grass and is mowed once or twice a year.

Challenges and Opportunities:

- 1) Maintain area and infrastructure.
- 2) Maintain fishing and recreational access for the public.
- 3) Improve and encourage educational and interpretive opportunities.
- 4) Build/maintain relationships with neighboring landowners.

Management Objective 1: Maintain area and infrastructure so that it is inviting for public use.

Strategy 1: Maintain current geocaches with local geocachers, according to Special Use Permit guidelines. (Forestry)

Strategy 2: Conduct periodic checks for vandalism and normal wear of area infrastructure, i.e., of hiking trails, bridges, floating dock, privies, archery range, primitive camping area, picnic tables and parking lots. (Forestry, Protection)

Strategy 3: Maintain current sign bulletin boards for area use and regulations. (Forestry, Protection)

Management Objective 2: Maintain fishing and recreational access for the public.

Strategy 1: Provide fishing opportunities according to the Wildlife Code of Missouri, CSR Chapter 11. (Protection)

Strategy 2: Maintain current maintenance contract to mow along portions of the lakes' banks. (Forestry)

Management Objective 3: Improve and encourage educational and interpretive opportunities.

Strategy 1: Establish interpretive signs along the hiking trail. (Forestry, Outreach and Education)

Strategy 2: Work with local schools and other groups to encourage field trips to the area. (Forestry, Outreach and Education)

Management Objective 4: Build/maintain relationships with neighboring landowners.

Strategy 1: Work with neighbors to minimize any boundary, trespass or any other issues affecting Shawnee Mac Lakes CA or private property. (Protection, Forestry)

Strategy 2: Promote habitat management on neighboring landowner properties. (Private Land Services, Forestry)

VIII. Administrative Considerations

Challenges and Opportunities:

- 1) Sustain funding for area maintenance contract.
- 2) Ensure Department boundaries are marked and visible to public users.
- 3) Acquisition of land.

Management Objective 1: Sustain funding for area maintenance contract.

Strategy 1: Annually budget for funds to maintain maintenance contract, i.e., for mowing, cleaning services and trash removal. (Forestry)

Management Objective 2: Ensure Department boundaries are marked and visible to public users.

Strategy 1: Continue the current five-year re-entry to maintain painted boundary lines and replace signs, as needed. (Forestry)

Lands Proposed for Acquisition:

When available, adjacent land may be considered for acquisition from willing sellers.

Tracts that improve area access, provide public use opportunities, contain unique natural communities and/or species of conservation concern, or meet other Department priorities, as identified in the annual Department land acquisition priorities, may be considered. (Forestry, Wildlife, Fisheries)

MANAGEMENT TIMETABLE

Strategies are considered ongoing unless listed in the following table:

| | FY16 | FY17 | FY18 | FY19 | FY20 | FY21 | FY22 | FY23 | FY24 | FY25 |
|--|------|------|------|------|------|------|------|------|------|------|
| Terrestrial Resource Management | | | | | | | | | | |
| <i>Objective 1</i> | | | | | | | | | | |
| Strategy 2 | | X | | X | | X | | X | | X |
| <i>Objective 2</i> | | | | | | | | | | |
| Strategy 2 | | X | | X | | X | | X | | X |
| <i>Objective 3</i> | | | | | | | | | | |
| Strategy 1 | | | X | | | X | | | X | |
| <i>Objective 4</i> | | | | | | | | | | |
| Strategy 1 | X | | | X | | | X | | | X |
| Aquatic Resource Management | | | | | | | | | | |
| <i>Objective 1</i> | | | | | | | | | | |
| Strategy 1 | | X | | | X | | | X | | |
| Strategy 3 | X | | X | | X | | X | | X | |
| <i>Objective 2</i> | | | | | | | | | | |
| Strategy 2 | | X | | | X | | | X | | |
| <i>Objective 3</i> | | | | | | | | | | |
| Strategy 1 | X | | X | | X | | X | | X | |
| Public Use Management | | | | | | | | | | |
| <i>Objective 2</i> | | | | | | | | | | |
| Strategy 2 | | X | | | X | | | X | | |
| <i>Objective 3</i> | | | | | | | | | | |
| Strategy 1 | | X | | | X | | | X | | |
| Strategy 2 | | X | | X | | X | | X | | X |
| <i>Objective 4</i> | | | | | | | | | | |
| Strategy 1 | | X | | | | X | | | | X |
| Administrative Considerations | | | | | | | | | | |
| <i>Objective 1</i> | | | | | | | | | | |
| Strategy 1 | | X | | | X | | | X | | |
| <i>Objective 2</i> | | | | | | | | | | |
| Strategy 1 | | | | X | | | | | X | |

APPENDICES

Area Background:

In 1982 the Conservation Commission approved the purchase of two separate tracts covering 256 acres using federal revenue funds. Each tract includes one lake. After the purchase, the tracts were combined to form the Shawnee Mac Lakes Conservation Area. The upper lake includes 30 acres (Ziske Lake); the lower lake includes 17 acres (Turner Lake). Both dams were renovated in 1986.

The area currently provides the public with a quality recreational experience within 2 miles of the city of Salem. The lakes are used heavily during warm seasons. The close proximity to the city of Salem makes the area a convenient and inviting place to fish, picnic, exercise and enjoy the outdoors.

Current Land and Water Types:

| Land/Water Type | Acres | % of Area |
|----------------------------|------------|------------|
| Upland Forest | 105 | 41 |
| Open Land | 64 | 25 |
| Impounded Water | 47 | 18 |
| Bottomland/Riparian Forest | 23 | 9 |
| Shortleaf Pine | 17 | 7 |
| Total | 256 | 100 |

Public Input Summary:

The draft Shawnee Mac Lakes Conservation Area Management Plan was available for a public comment period July 1–31, 2015. The Missouri Department of Conservation received comments from three respondents (Appendix A). The Shawnee Mac Lakes Conservation Area Planning Team carefully reviewed and considered these ideas as they finalized this document. A brief summary of public input themes, including how they were incorporated or why they were not, can be found below. Rather than respond to each individual comment, comments are grouped into general themes and are addressed collectively.

Department responses to themes and issues identified through Shawnee Mac Lakes Conservation Area public comment period

Suggests eliminating fescue where possible.

While there are issues with fescue grass, in high traffic areas this grass that can take a great deal of use and pressure and still remain alive and green. The fescue was here when the property was

acquired, and has held up well with little to no problems for our neighbors, that we know of, with the high use the lakes gets.

Concern with increased nuisance wildlife (groundhog, raccoon, opossum, snakes) on neighboring property. Suggests planting more persimmon and plum trees to keep wildlife on conservation property.

We strive to provide healthy and diverse natural communities to support the needs of a broad array of wildlife native to Missouri. We will consider planting more wildlife friendly plants and trees around the parking areas for the public and to hopefully alleviate some of your nuisance wildlife problems.

Concern with too much vegetation in lakes.

Fisheries staff treats the lakes yearly for nuisance aquatic vegetation and to reduce the amount of vegetation. The lake needs 25% to 40% aquatic vegetation to produce a quality fishery and this balance varies year to year.

Suggests repairing fences between neighboring property.

Most, if not all, of the fences around Shawnee Mac Lakes were in place when the property was acquired. Most of them were put up by the neighbors to keep their livestock on their property and out of the Lakes area. The lower portion below the lower lake was a farm with livestock and they did put up a fence to contain their animals. Since no livestock is kept on the Shawnee Mac Lakes area, the fence around the lower portion is not needed any more. Other portions of the Lakes adjoin farmers with livestock. They own the fence and maintain it themselves. If a neighboring landowner has no fence or a very old fence is in place, the Department will enter into a cooperative agreement with them to share the cost of installing a boundary fence that meets certain minimum standards and as budgets allow. Through this agreement, the Department traditionally pays for the fencing materials and the neighboring landowner bears the cost of installing the fence as their half of payment. From that point forward, the neighboring landowner maintains the fence to contain their livestock. Any fence that needs repairing is the responsibility of the neighboring landowner(s). Even if a fence does not exist, the Department will continue to post boundary lines with signs to alert area users of where public use stops.

Suggests adding a restroom at the first parking lot.

At one time the Department had a privy at each of the parking lots at the Lakes. These were the old cinder block types that over time started leaking. When the Department started replacing these with the new solid concrete models we would evaluate which privies were needed. With the addition of a privy to the area by the archery range and camping area, it was felt that only two privies were needed on the area. Since the second parking lot gives access to both lakes and the hiking trails, it was decided that this would be the best location for the second privy. Both of

the privies get pumped out every year or as needed and so far neither shows evidence that a third privy is again needed on the area.

Suggests increased maintenance of area grounds.

During the busiest six months of the year, April 15 to October 15, we have a maintenance contractor. The contractor's job is to mow the area every two weeks or when the grass reaches five inches in height, whichever occurs first. Once a week they are to pick up trash from the designated mowing areas, clean the privies, picnic table pads and pavilion pad. This past summer all the rain created a very busy mowing season. The contractor was stretched thin trying to keep up with all the work. Your comment was passed on to them and improvements should be noticed for the remainder of the contract period. During the other six months of the year, Department staff pick up trash and maintain the area once a month or as needed.

Supports acquiring additional land to enlarge this area.

As stated above the Department is always open to acquiring adjacent lands from willing sellers. When a piece of property is offered for sale, Department staff look it over to see what it will offer for the area and/or if it contains any unique natural communities and/or species of conservation concern. From there it is sent to our Reality staff who see if it meets other Department priorities, as identified in the annual Department land acquisition priorities.

References:

Missouri Department of Conservation. (1995). *Shawnee Mac Lakes Conservation Area management plan*.

Maps:

Figure 1: Area Map

Figure 2: Aerial Map

Figure 3: Topographic Map

Figure 1: Area Map

SHAWNEE MAC LAKES CONSERVATION AREA

DENT COUNTY
256 ACRES

LEGEND

| | |
|------------------------|-----|
| Boundary | --- |
| Gravel Road | --- |
| Drainage | --- |
| Hiking Trail | --- |
| Parking Lot | ■ |
| Privy | ■ |
| Pavilion/Picnic Area | ■ |
| Picnic Area | ■ |
| Primitive Camping Area | ■ |
| Archery Range | ■ |
| Gate | ■ |
| Boat Ramp | ■ |
| Fishing Dock | ■ |
| Disabled Accessible | ■ |
| Forest | ■ |
| Topography | ■ |

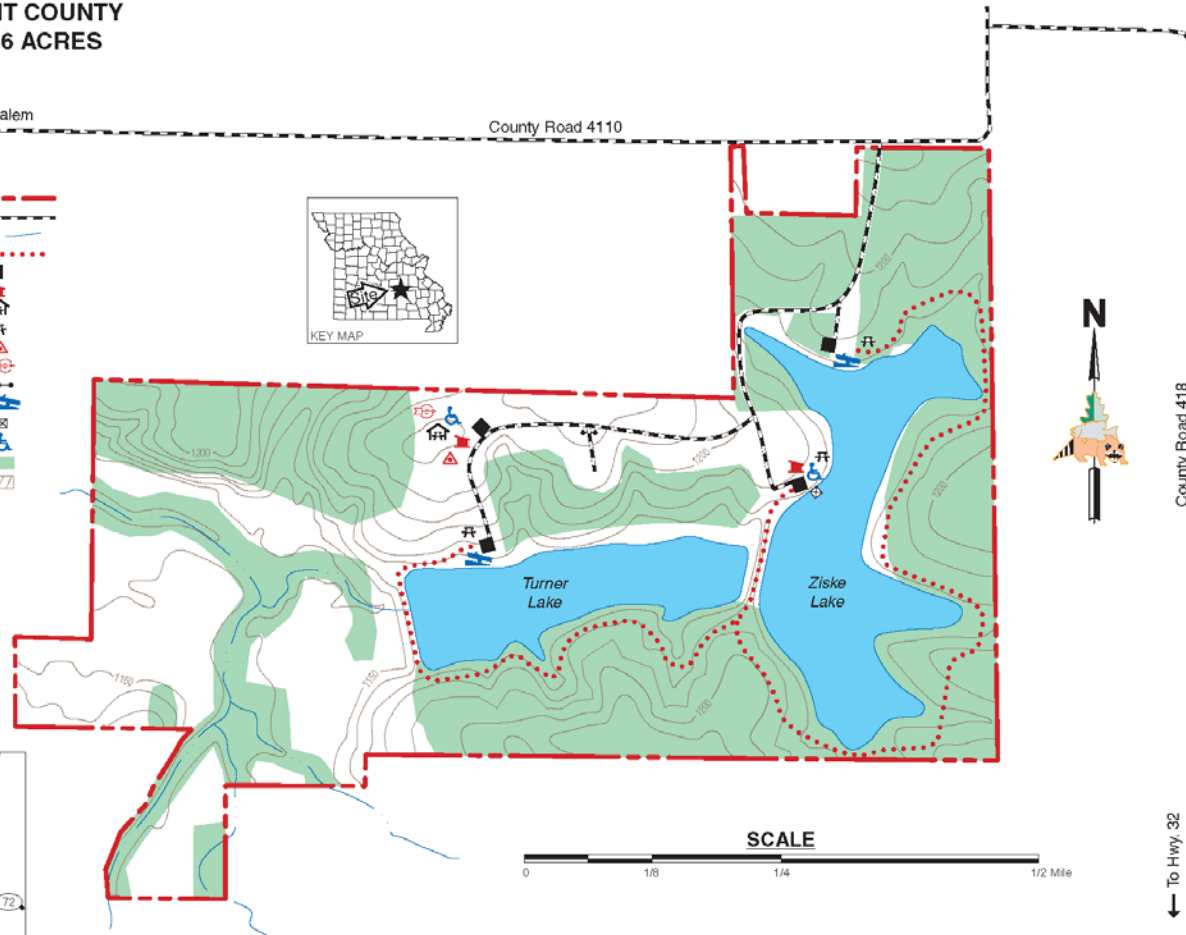


Figure 2: Aerial Map

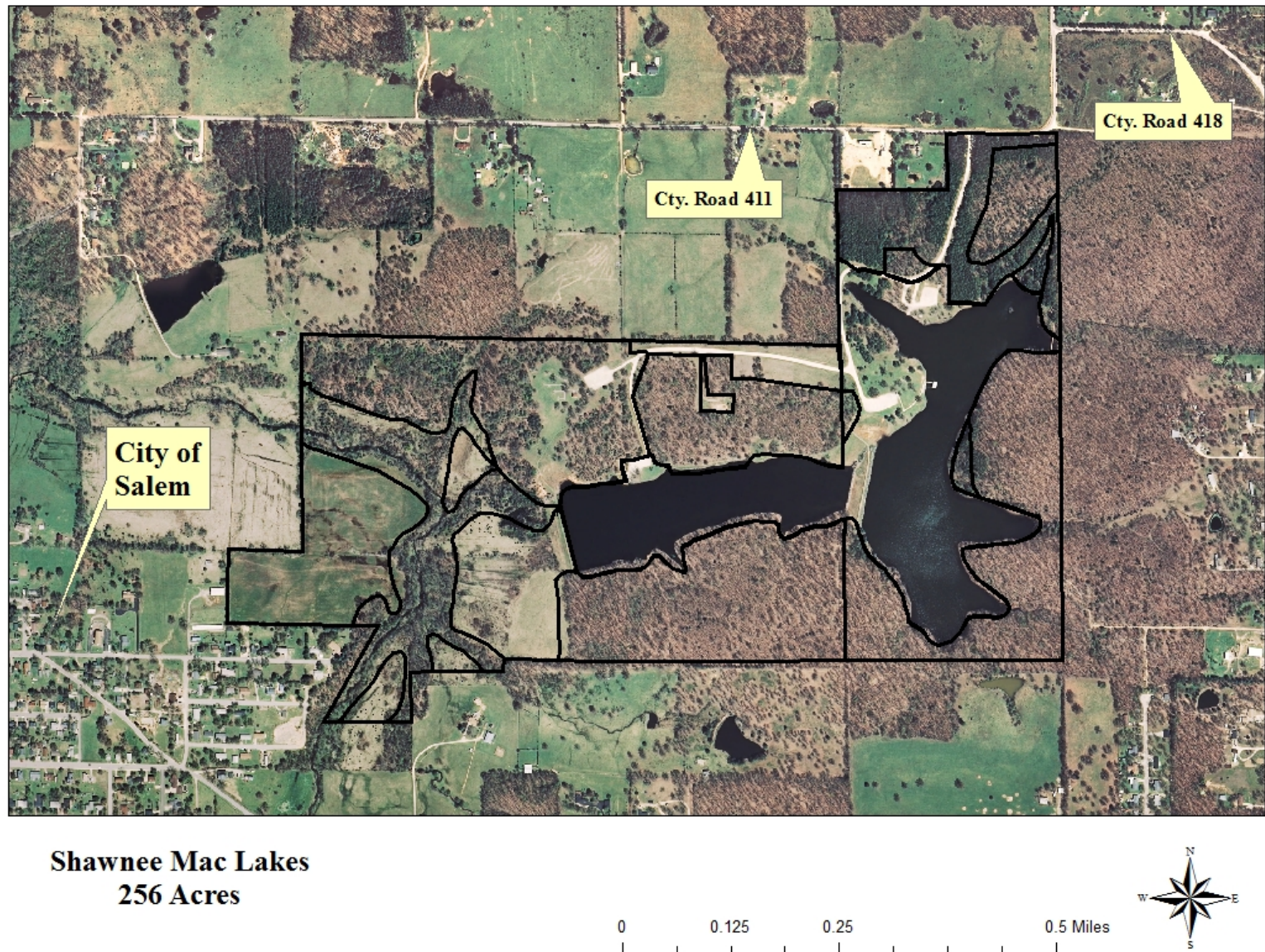
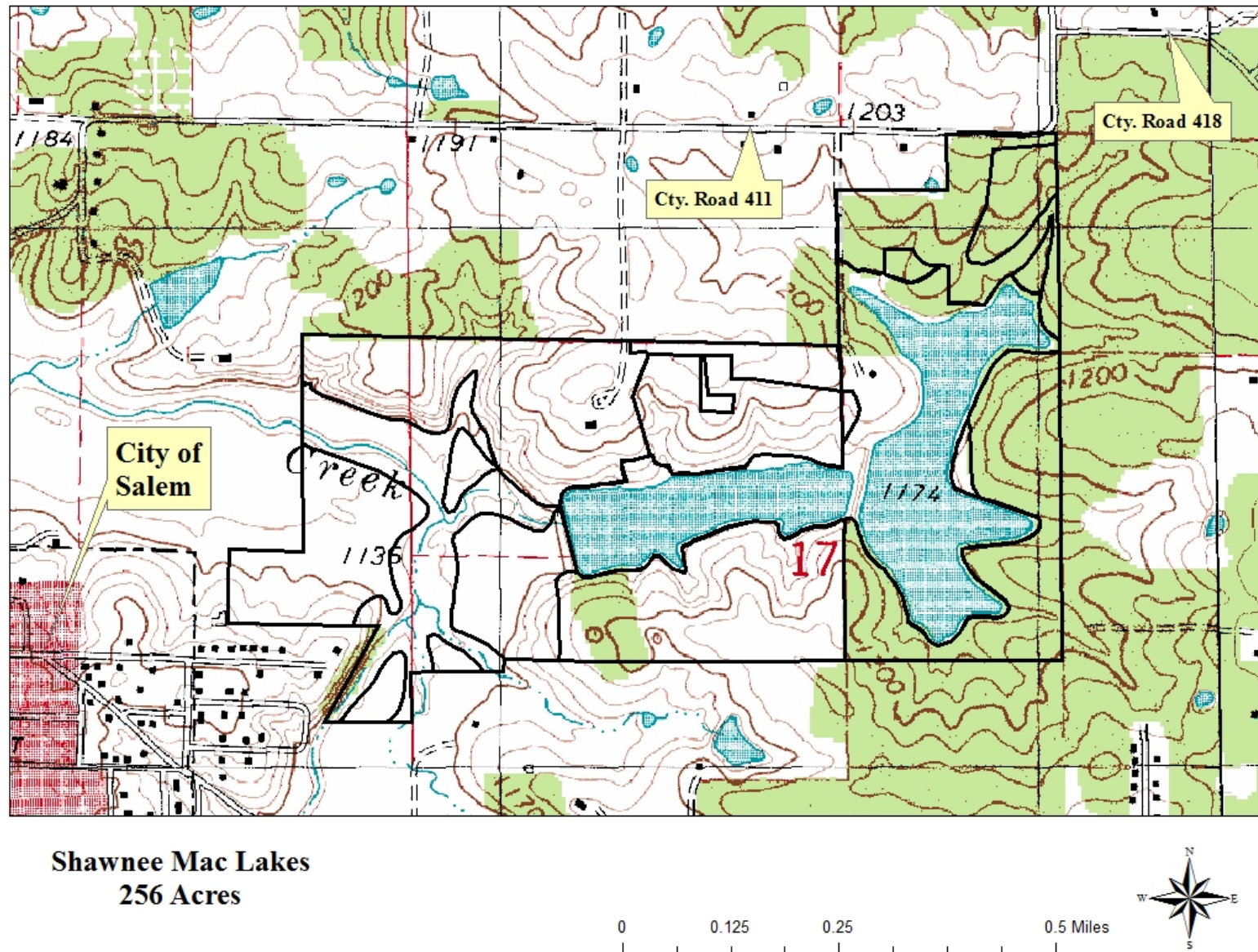


Figure 3: Topographic Map



Appendix A. Shawnee Mac Lakes Conservation Area Management Plan Public Comments

Received during public comment period (July 1-31, 2015):

| |
|--|
| Good plan. I like the opportunity to enlarge acreage. Would like to see elimination of fescue when possible |
| While the lake area is nice your returning the field area behind my house to a more natural state has increased the groundhog, raccoon, opossum and snake population three fold. I have fruit trees that they get more of than I do. I recommend you plant more persimmon and plum trees adn repair the fences between the land owner and conservation properties. |
| You need to install a restroom in the first parking lot, and clean the lakes out fo the weeds and take better care of the grounds. |